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SYMMETRICAL AND ASYMMETRICAL SCAFFOLDING IN ENGLISH READING COMPREHENSION OF IRANIAN EFL LEARNERS

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Abstract:
This study seeks to investigate the impact of symmetrical (S) and asymmetrical (AS) scaffolding, which are two types of scaffolding, on advance students' reading comprehension. Forty advance Iranian EFL learners participated in this study. The participants were both male and female students with an average age of 21 with almost the same educational facilities and physical conditions in the academic year 2015-2016. They were randomly divided into control and experimental groups. Each group had 20 students. Classes were taught by two different teachers. Each of the teachers has two classes (one symmetrical and one asymmetrical). After administering a Pre-test, they were divided into two experimental groups. The experimental group (A) received instruction according to S strategy whereas the experimental group (B) was instructed via the AS strategy. A Post-test was administered, and its results were analyzed through t-test. The results indicated that although S scaffolding has significant effect on learners' performance in reading comprehension, enhancing it but AS scaffolding is a more effective strategy in improving reading comprehension achievement.

Keywords: scaffolding, symmetrical scaffolding, asymmetrical scaffolding, the zone of proximal development

I. Introduction

1.1 Background

Nowadays, English is the language of international communication. That is why learning main language skills that is, listening, speaking, reading and writing have become important for students all over the world. Although a lot of information and

knowledge is exchanged and transferred among teacher and students by using all four skills in the classrooms, among these skills, reading has gained a lot of attention among teachers and students – maybe because of some reasons like withstanding in schools or at universities, expanding knowledge, communicating different ideas, and enhancing the social skills. Teachers give special attention to reading in teaching situations and have labored long and hard to increase the reading skills (Grabe and Stoller, 2002).

Reading in second language (L2) settings continues to take on increasing importance… L2 reading ability, particularly with English as the L2, is already in great demand as English continues to spread, not only as a global language but also as the language of science, technology and advanced research. Many people in multilingual settings need to read in an L2 at reasonably high levels of proficiency to achieve personal, occupational and professional goals (Grabe and Stoller, 2002).

Also, according to Levine, Ferenz, and Reves (2000) "*the ability to read academic texts is considered one of the most important skills that university students of English as a second language (ESL) and English as a foreign language (EFL) need to acquire*" (p.1). However, as Karasakaloglu (2010) states "*reading action cannot be called reading without comprehending*" (p.222).

There are a lot of problems in comprehending an English text. It may have various reasons such as lack of vocabulary, grammatical knowledge, or some psychological problems like fearing failure, lack of motivation (Magno, 2010). To decrease these problems, recently most of the teachers use various strategies. For example, they try to change the setting of the classrooms from traditional teacher-centered to learner-centered settings (Anton, 1999) or they attempt to use cooperative learning methods in the classroom. To do so, traditional role of a teacher may be replaced by the active role of students via pair or small group work where students are responsible for their own learning. In these small groups, students can learn more by interacting with and teaching to other students (Van Lier, 1996). Also, as Ohta (2005) states "*the learner is, with assistance, able to outperform what she or he could do without assistance*" (p.507).

In recent years, the concept of zone of proximal development (ZPD) has come to be known as one of the cardinal features in learning from a sociocultural perspective. Thus, it has increasingly been applied to second language education. ZPD was first introduced by the Russian psychologist Lev Vygotsky in Thought and Language (1986).

Russian psychologist Lev Vygotsky (1986) believed that learners should be assessed not through their actual knowledge but through their potential knowledge. In his view, social context is the original source of knowledge. Lantolf (2007) purports that Vygotsky has proposed a wide view of cognition by considering the environment itself

as the source of development. To Vygotsky, ZPD indicates "the discrepancy between a child's actual mental age and the level he reaches in solving problems with assistance" (1986: 187).

In fact, any assessment regardless of social interaction cannot be the mirror of reality. This notion has a central role in sociocultural theory applied to second language education. It should be mentioned that in this study, the enlarged notion of ZPD is meant. The "enlarged" notion of ZPD refers to "*a site of potential learning that is created when participants of all ages and levels - and not just children and adults or novices and experts – collaborate in understanding a concept or solving a problem*" (Wells, 1999, cited in Villamil & de Guerrero, 2005: 79-80).

1.2 Statement of problem

Reading comprehension is the cornerstone of reading skill (Karasakaloglu, 2010). Many EFL students have a lot of trouble and difficulties in understanding the information presented in the written form of English texts, and sometimes it may be very time consuming for them to read a text in English and understand it.

In reading an English text in the shape of group activity, scaffolding that comes from the students' peers and also sometimes from the classroom's teacher is considered as an utmost important fact. However, the problem that arises here is whether there is a significant difference between these two kinds of group working, asymmetrical and symmetrical.

In spite of increasing students' amount of comprehensible input by applying different scaffolding procedures from the peers in groups, some of the students in those groups fail to interact and negotiate effectively with their peers so their reading comprehension cannot develop efficiently. This is the place that EFL teacher can act as facilitator and provide more language support for students in the groups, and she or he can remove, to some extent, the affective factors and encourage motivation and self - confidence of students. So, the effects of various scaffoldings – that of peer and teacher, in symmetrical and asymmetrical groups – such as skimming, scanning, warm-up activities, L1 translation… (Poorahmadi, 2010) and their effects on the reading comprehension development of EFL students in those groups need to be investigated.

1.3 Purpose of the study

The aim of this study was to uncover the effect of symmetrical and asymmetrical scaffolding on English reading comprehension of advance EFL learners. In fact, the comparison is made between two common notions of grouping, heterogeneous versus homogeneous, highlighting the potential knowledge of the learners. Furthermore, in

this study, also, a comparison is made between asymmetrical and symmetrical scaffolding on the reading comprehension.

1.4 Research Question

This study has focused on question as follows: *"Is there any significant difference between symmetrical and asymmetrical scaffolding in English reading comprehension of Iranian EFL learners?"*

2. Review of Literature

2.1 Instruction scaffolding (IS)

Wood, Bruner and Ross together coined the term scaffolding as a metaphor to describe the effective process by which an adult, a peer, or a competent person assists a child to perform a task beyond his or her current capability.

Wood, Bruner and Ross (1976) define scaffolding as a process that enables a child or a novice to solve a problem, carry out a task, or achieve a goal which would be beyond his unassisted efforts.

Bruner (1983) defines scaffolding as "*a process of 'setting up' the situation to make the child's entry easy and successful and then gradually pulling back and handing the role to the child as he becomes skilled enough to manage it."* Wood (1988) defines scaffolding as: "*tutorial behavior that is contingent, collaborative and interactive*". Since then, an increasing number of educational specialists and experts have used.

The concept to describe and explain the role of adults or more knowledgeable peers in guiding children's learning and development (Stone, 1998; Wells, 1999; Hammond, 2002; Daniels, 2001).

IS the means by which support is provided and adjusted, and it serves the function of 'facilitating the collaboration necessary between the novice and the expert for the novice to acquire the cognitive strategy or strategies' (Palinscar, 1986). Like training wheels, scaffolding enables learners to do more advanced activities and to engage in more advanced thinking and problem solving than they could without such help (NRC, 2000).

Instructional scaffolding is an old concept with a new name. Most teachers have used scaffolding activities in the classroom in one or more ways. Research suggests that providing assistance and support to students through instructional scaffolding optimizes student learning. It is similar to the scaffolding used in construction to support workers as they work on specific tasks (Huggins & Edwards, 2011).

Scaffolding has proven to be one of the most recommended, versatile, and powerful instructional techniques of socio-constructivist teaching (Clark & Graves, 2004).

Davis and Miyake (2004) define scaffolding simply as support in the form of reminders or help. They view scaffolding as a component of a larger set of methodology in activity-based learning: modeling (demonstrating), coaching, articulation, reflection, and exploration. Pearson (1996) points out that scaffolding allows teachers to provide cueing, questioning, coaching, corroboration, and plain old information to help students complete a task before tackling it independently. That is, scaffolding can lend support to help bridge a gap between what students know and can do, versus what they don't know or can't do, but intended to know and do (Gillies & Boyle, 2005). Scaffolding is one of the principles of effective instruction that enables teachers to accommodate individual student needs (Simmons et al., 2002).

Scaffolding is temporarily provided and it is gradually removed bit by bit as the learners become more competent independently (Yu, 2004; Cameron, 2001). Bradley and Bradley (2004) considered scaffolding as the contextual support for meaning that is offered through simplified language as in avoiding the use of idioms; teacher modeling; using graphic organizers, tables, graphs, and visuals; hands-on learning; and cooperative learning.

Sharpe (2006) expounds the notion of scaffolding that is congruent with the essentially social nature of learning and affirms the importance of language in making meaning within this process. Jumaat and Tasir (2014) define instructional scaffolding as a guidance or support from teachers, instructors or other knowledgeable persons that facilitate students to achieve their goals in learning. Conceptually, scaffolding means providing students with instructions during the early stage of learning before slowly shifting the responsibility to them as they develop their own understanding and skills.

Sawyer (2006) defines instructional scaffolding as a learning process designed to promote a deeper level of learning. Scaffolding is the support given during the learning process which is tailored to the needs of the student with the intention of helping the student achieves his/her learning goals.

Instructional scaffolding can be thought of as three related pedagogical 'scales'. First, there is the meaning of providing a support structure to enable certain activities and skills to develop. Second, there is the actual carrying out of particular activities in class. And, third, there is the assistance provided in moment-to-moment interaction (Gibbons, 2003; van Lier, 1996). As scaffolding is premised upon the notion of handing over (by the teacher) and taking over (by the student), assistance provided should always be only 'just enough' and 'just in time'.

In the classroom, scaffolding is a process by which a teacher provides students with a temporary framework for learning. When scaffolding is done correctly, students are encouraged to develop their own creativity, motivation, and resourcefulness. As students gather knowledge and increase their skills on their own, fundamentals of the framework are dismantled. At the completion of the lesson, the scaffolding is removed altogether and students no longer need it (Lawson, 2002).

3. Methods

3.1. Participants

The study was conducted in four classes at two Privacy Language Institutes in Zahedan, Iran. Forty advance Iranian EFL learners participated in this study. The participants were both male and female students with an average age of 21 with almost the same educational facilities and physical conditions.

Each class was held for twenty four sessions (two month), three days a week and every session lasted for one hour and fifteen minutes. The four classes were intact and were randomly assigned to two different experimental conditions, i.e. symmetrical and asymmetrical. They all speak Persian as their first language and English as a foreign one.

3.2. Instruments

The instruments of this study were:

1. Ten passages from the advanced level of True To Life, five from its workbook, and five from the class-book, were used as the reading texts in this study. Each major level of True To Life has two main books, the class-book and the workbook. During the course of this study, the students were supposed to read the reading comprehension passages in groups. While reading, the students were given feedback by the teacher.
2. Two virtually parallel cloze tests, were developed by the researcher, were served as pre- and post-tests. The reliability of it was calculated .71, using Cronbach's alpha.

3.3. Procedure and Data collection

As mentioned earlier, the participants of the study were in four advance classes at two Language Institutes. The classes were taught by two different teachers. One of the teachers took two advance classes and the other teacher took other classes. One asymmetrical classes and one symmetrical class were taken by one of the teachers and

the other one symmetrical classes and one asymmetrical class were taken by the other teacher in order to minimize any probable differences in teaching.

The intra-class group assignment was carried out in accordance with the pre-test. In the two symmetrical classes, the students with similar scores were in the same intra-class groups, while in the two asymmetrical classes the intra-class groups were consisted of heterogeneous students. This means that based on the results of the pre-test, each intra-class were consisted of good, moderate, and poor students. During the course of the study, the students were worked on ten reading comprehension passages, five from their workbook and five from their course-book (class-book). While reading, the students were assisted from an implicit to an explicit mode based on the simplified scale of Aljaafreh and Lantolf (1994)'s study. In almost every other session, students were presented with one reading comprehension. Therefore, on the whole, the participants were exposed to 10 reading comprehension passages. In each class, the participants were divided into two or three intra-class groups of four, depending on the number of the students in each class.

At the end of the treatment period, the cloze post-test, paralleled to the pre-test were taken from *advance level of Headway,* was administered. Finally, two independent samples *t*-tests will be employed to compare the performance of both symmetrical and asymmetrical groups, i.e. the inter-class groups in four classes on the pre- and post-tests. Moreover, two paired *t*-tests were carried out to compare the performance of each class on pre- and post-tests.

4. Results

4.1. Descriptive statistics

Descriptive statistics summarized the characteristics of data including mean, minimum and standard derivation. Table 4.1 displays the descriptive statistics of both symmetrical and asymmetrical groups on the pre-test.

Table 4.1: Descriptive statistics of the participants with regards to reading comprehension

Pre-test	N	Mean	Standard-Derivation
Symmetrical group	20	17.62	5.45
Asymmetrical group	20	16.71	4.47

Descriptive statistics clearly indicates that the mean score for the Symmetrical group 17.62 (SD= 5.45) while the mean score for the Asymmetrical group is 16.7 (SD= 4.47),

respectively. Indicating that the mean scores of those Symmetrical group is higher than those of Asymmetrical group.

4.2. Research hypothesis

There is no statistically significant difference between symmetrical and asymmetrical scaffolding in English reading comprehension of Iranian EFL learners.

The independent samples t-test showed no significant differences between the mean scores of both groups, t (78) =1.43, p>.05. This suggests that the two groups were homogeneous and reliability indices of reading comprehension was 75 therefore, the reliability assumption of test was not violated. In other words, there was no significant difference between the scores of reading-comprehension of the two groups at the outset of the research.

After one month, the students were asked to take another cloze test, similar to the pre-test, as their post-test. Table 2 shows the result of the group statistics comparing the post-test of the two groups carried out at the end of the research.

Table 4.2: Group Statistics in the Post-test

Pre-test	N	Mean	Standard-Derivation
Symmetrical group	20	18.76	5.32
Asymmetrical group	20	15.92	4.48

The result of the independent samples t-test revealed a statistically significant difference between the mean scores, t (35) = 2.02, p<.05. This suggests that the participants in the symmetrical group (SG) outperformed those in the asymmetrical group (AG) and therefore the firs research question was answered positively.

5. Discussion and Conclusions

5.1. Discussion

Q: *"Is there any significant difference between symmetrical and asymmetrical scaffolding in English reading comprehension of Iranian EFL learners?"*

The data in this study were analyzed using both descriptive and inferential statistics. Interestingly enough, the results of the study are not completely in line with Vygotsky's notion of MKO, which hinges on the presence of MKO in any interaction. In contrast, the results are similar to Piaget's notion in relation to cognitive development, which centers on the role of collaboration to the exclusion of an MKO.

Moreover, the findings did not lend support to Crandall's (1999) idea regarding cooperative groups, which emphasizes the benefit of all students in a group. That is to say, in her opinion both more-able and less-able students almost equally benefit from cooperation. While in this study the homogeneous group outperformed the heterogeneous group, more specifically, the cooperation among the less-able students with more-able students in the heterogeneous group was not as effective as that of the homogeneous group.

Further, this study is consistent with the construct of scaffolding proposed by van Lier (2004), which states that "*this construct must be expanded to include not only an expert-novice relationship, but also an equal peer one, a peer to lower-level peer one, and a self-access, self-regulated on*" (p. 162). More importantly, in this study the assessment of the students, through two cloze tests with the help of their dictionaries, refers to an enlarged notion of ZPD. In contrast, the group activities and interactions refer to the common notion of ZPD, which emerges through interaction and group activities.

6. Conclusion

As the data analysis indicates, the SG participants benefited more from reading comprehension than the AG participants. In other words, whenever the students were grouped with other students of similar ZPDs, they were more successful than when they were grouped with those of different ZPDs. The causes for the aforementioned differences between the two groups can be due to several factors. First, in the AG students with different potentials (ZPDs) in reading comprehension were grouped together, which caused two problems. Second, from the more able students' vantage point, less able students might hinder cooperation and thus they might waste time. Therefore, effective cooperation did not occur well. Third, from the less able students' point of view, they should be reserved in order not to hinder the pace of the class. In other words, the primary reason that the SG participants outperformed the AG participants can be ascribed to affective factors. Additionally, in the SG the students with the similar ZPD were grouped together; therefore, they had a sense of competition, a competition which was fair in that they competed with the students with similar potential knowledge in English reading comprehension.

6.1 Implications of the study

It is important that educational contexts, as well as institutes' administers provide clear opportunity in order to enhance reading comprehension of learners so as an emphasis to determine an approach to improve this ability. In this case, the researcher investigate

symmetrical versus asymmetrical scaffolding on English reading comprehension curriculum.

Regarding the scaffolding strategies that are used for reading classrooms, Gibbons (2002) described strategies and activities that mainstream teachers can incorporate into the classroom to help enhance reading skills through scaffolding.

This study tried to open a new window for Iranian researchers in improving students' reading comprehension abilities and even general English classes.

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